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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 10/667,874   | 09/22/2003  | Christoph Liebetrau  | 16525                      | 1177             |
| 50659  | 7590        | 06/20/2006           |                            |                  |
| BUTZEL LONG<br>DOCKETING DEPARTMENT<br>100 BLOOMFIELD HILLS PARKWAY<br>SUITE 200<br>BLOOMFIELD HILLS, MI 48304 |             |                      | EXAMINER<br>KRUEER, STEFAN |                  |
|  |             |                      | ART UNIT<br>3654           | PAPER NUMBER     |

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/667,874 | <b>Applicant(s)</b><br>LIEBETRAU ET AL. |  |
|                              | <b>Examiner</b><br>Stefan Krueer     | <b>Art Unit</b><br>3654                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.  
     4a) Of the above claim(s) 13 - 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 14, 15 - 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3 Nov. 2003</u> | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Upon issue of the last Office action, mailed on 17 May 2006, the examinations of rejected **Claims 9 – 11** were inadvertently omitted, for which corrective action follows.

The period for reply of 3 MONTHS set in said Office Action is restarted to begin with the mailing date of this letter.

**Claims 13 and 14** are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10 May 2006.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 – 3, 5 – 7, 12 and 15** are rejected under 35 U.S.C. 102(b) as being anticipated by Fromberg (5,224,570).

**Re: Claims 1 – 3**, Fromberg discloses a safety device comprising:

- Retaining element (3),
- An abutment (7) spaced from and fixed relative to said retaining element,
- A braking element (11) movably positioned between said retaining element and said abutment and spaced a distance from said retaining element to accept a portion (4) of a guide rail (5),
- Said braking element having a rest position spaced from the surface of said guide rail,
- A lever mechanism (20, 1, Fig. 1) connected to said braking element for moving said braking element from said rest position to a braking readiness position contacting the surface of said guide rail (at camming surface 13),

whereby downward movement of movement of the elevator causes said braking element to be squeezed between the guide surface and said abutment,

- an operating mechanism (6) connected to said lever mechanism for selectively moving said braking element between said rest and readiness positions,
- said braking element is a blocking roller,
- said abutment is angled relative to said retaining element whereby an interspace (2) narrows between said retaining element and said abutment opposite a predetermined direction of motion of the elevator car.

**Re: Claims 5 – 8,** Fromberg discloses a safety device comprising:

- a guide (9) along which the position of said braking element is changeable,
- said guide forms an oblong recess,
- said guide is shaped to hold said braking element in said rest position,
- said operating mechanism which applies a force to his braking element for bringing said braking element into contact with said guide surface and keeping said braking element in a state of equilibrium whereby said braking element is moved automatically relative to said abutment and opposite to the direction of motion of the elevator car.

**Re: Claim 12,** Fromberg discloses his guide surface (one side of portion 4) is one guide surface of his guide rail (5) and said retaining element (3) is a first guiding element for guiding the elevator car alongside another guide surface (opposite side of portion 4) of the guide rail.

**Re: Claim 15,** Fromberg discloses safety device having a U-shaped configuration.

**Claims 4, 8 – 11 and 16 - 18** are rejected under 35 U.S.C. 103(b) as being unpatentable in view of Fromberg over Rebillard et al (US 6,173,813).

**Re: Claim 4**, Fromberg does not disclose his lever mechanism swiveling about an axle, his lever mechanism being ultimately linked to a non-depicted governor or speed limiter (Col. 4, Line 59).

Rebillard et al teach their lever mechanism (94) connected to their braking element (96) of roller form, whereby their lever mechanism swivels around an axle (100) in response to electromechanical actuating means in lieu of the non-depicted mechanical means of Fromberg.

It would have been obvious to one of ordinary skill in the art to modify the invention of Fromberg with the teaching of Rebillard et al to facilitate electromechanical means in keeping with automation.

**Re: Claim 8**, Fromberg discloses his operating mechanism which applies a force to his braking element for bringing said braking element into contact with said guide surface and keeping said braking element in a state of equilibrium whereby said braking element is moved automatically relative to said abutment and opposite to the direction of motion of the elevator car; however, his automatic motion is in response to the lever mechanism.

Rebillard et al teach their operating mechanism (bounded by 71, Fig. 5) for automatic movement of their braking element relative to their abutment in response to their deactivation of their operating mechanism, in keeping with a fail-safe operation.

It would have been obvious to one of ordinary skill in the art to modify the invention of Fromberg with the teaching of Rebillard et al to provide a fail-safe mode in keeping with conventional, electromechanical control means.

**Re: Claims 9 - 11**, Fromberg discloses his operating mechanism as a mechanical device.

Rebillard et al teach their operating mechanism having a solenoid (20) that "...exerts magnetic force... on said braking linkage..." (Col. 1, Line 58) whereby said braking element is maintained in said rest position. Furthermore, if the solenoid is deactivated, thereby extinguishing the electromagnetic force, their bolt (86) to which their lever mechanism (94) is pivotally connected, is forced by their pre-loaded spring

(88) to move their braking element to a brake readiness position, whereby the braking element automatically proceeds to a full braking position in response to the opposite motion of their elevator car and the fixed position of their inclined abutment.

It would have been obvious to one of ordinary skill in the art to modify the invention of Fromberg with the teaching of Rebillard et al to provide a fail-safe mode in keeping with conventional, electromechanical control means.

**Re: Claim 16**, applicant has stated that the brake lining of the instant invention is well known to the automotive industry (Para. 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize materials common to the automotive industry for brake linings.

**Re: Claims 17 and 18**, Fromberg discloses:

- first leg and second legs (1a and 9), said first leg having a brake lining (3) attached thereto and said second leg spaced from and fixed relative to said first leg,
- a blocking roller (11) movably positioned between said first leg and said second leg and spaced a distance from said first leg to accept a portion of a guide rail therebetween,
- said blocking roller having a brake rest position,
- a lever mechanism (20, 1, Fig. 1) connected to said braking element for moving said braking element from said rest position to a braking readiness position contacting the surface of said guide rail (at camming surface 13), whereby downward movement of the elevator causes said braking element to be squeezed between the guide surface and said second leg,
- an operating mechanism connected to said lever mechanism for moving said blocking roller between said rest and braking readiness positions;

however, the operating mechanism does not move the blocking roller selectively.

Rebillard et al teach their operating mechanism (bounded by 71, Fig. 5) for movement of their braking element from the brake rest to readiness positions, in

automatic response to either an over-speed or similar condition as well as by selective control.

It would have been obvious to one of ordinary skill in the art to modify the invention of Fromberg with the teaching of Rebillard et al to provide an operating mechanism providing either automatic or selective engagement of the braking element, for safety and maintenance purposes.

**Re: Claim 18**, Fromberg discloses said first and second leg are formed as legs of a U-shaped safety device block (Fig. 2) and an interspace (2) narrows between said second leg and said guide surface opposite the direction of motion of the elevator car.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Muff et al (6,758,210 B2) and Ericson et al (5,002,158) are cited for reference of a safety brake with pivoting lever actuated blocking roller and spring actuated braking means, as well as a safety-braking disc using blocking rollers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK 17 May 2006

  
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